

Amendments to the Drawings:

The attached formal drawing sheet for FIG. 1 is being submitted to replace the drawing for FIG. 1 currently on file. This replacement drawing includes reference numeral 46 to refer to the “instruction sheet” and the reference numeral 48 to refer to the “trimming device.” This formal drawing contains no new subject matter.

Attachment: One (1) Replacement Sheet (FIG. 1).

REMARKS

This application has been reviewed in light of the Office Action dated June 27, 2005. Claims 1-12 and 14-16 are pending, with Claims 1 and 11 in independent form. The features of Claim 13 have been incorporated into its independent Claim 11, and, consequently, Claim 13 has been cancelled, without prejudice or disclaimer of the subject matter presented therein. Independent Claims 1 and 11 have been amended to emphasize that output media size and image location on such output media are automatically chosen to make post-process trimming more efficient. With the exception of these aforementioned amendments, the other amendments to Claims 1, 5, 6, 11, and 14-16 pertain to matters of form only, and do not narrow the scope of any of these claims. Favorable reconsideration is requested.

As an initial matter, Applicant respectfully requests that the PTO-1449 form from the Information Disclosure Statement submitted on January 30, 2001 be initialed and returned to Applicant, indicating that the cited references have been considered. Please find enclosed with this Amendment a copy of such submission.

The Office Action includes an objection to the drawings and the specification requiring that reference numerals be added to the "trimming device" and the "instruction sheet" in FIG. 1 and that a corresponding description of these features be added to the specification. Applicant submits herewith a replacement sheet of FIG. 1 including reference numerals 46 and 48 for the "trimming device" and the "instruction sheet," respectively. Applicant also has amended the specification to refer to these reference numerals. Because these changes to the specification pertain to matters of form only, Applicant respectfully submits that no new matter has been added. Applicant believes that the objections to the drawings and specification have been addressed and respectfully request their withdrawal.

Claims 7, 8, 15, and 16 were rejected under 35 U.S.C. §112, second paragraph, as allegedly failing to set forth the subject matter which Applicant regards as his invention. In particular, the Office Action is understood to allege that the specification does not provide support for a trimming process that does not involve an operator. See page 4, paragraph number 7 of the Office Action.

Applicant respectfully traverses these rejections and submits that Claims 7, 8, 15, and 16 are fully supported by the originally filed specification. In particular, support for sending trimming instructions to a trimming device (Claims 8 and 16) may be found at least at page 7, lines 5-7 and page 12, lines 13-16 of the specification as originally filed. Page 12, lines 13-16 state that, "In another preferred embodiment, when an in-line automatic trimmer is attached to the printer, the trim instructions may be sent directly to the trimmer, to allow trimming to be performed automatically." The originally filed specification provides support for printing instructions for setting up a post-printing trimming device (Claims 7 and 15) at least at page 7, lines 2-8 and page 12, lines 9-13.

The Office Action asks, "Does the trimming device automatically detect the sheet and trim the print job accordingly?" Applicant respectfully submits that Claims 7, 8, 15, and 16 do not require such activity; they require printing instructions or sending instructions to a trimming device. Whatever conduct is actually performed with the instruction sheet or the transmitted instructions is not claimed. What is claimed is that the instructions are printed (according to Claims 7 and 15) or sent (according to Claims 8 and 16). Therefore, Applicant respectfully submits that the full scope of what is claimed by Claims 7, 8, 15, and 16 is supported by the originally filed specification as described above. Any trimming activity beyond printing instructions or sending instructions is not required by these claims, and, accordingly, Applicant submits that support for such activity also is not required.

In view of the above-discussed reasons, Applicant respectfully requests withdrawal of the Section 112, second paragraph rejections.

Claims 1-6 and 9-10 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. 5,461,459 (Muramatsu et al.) in view of "Applicant's Admitted Prior Art" ("AAPA") or PCT Publication No. WO 96/32725 (Silverbrook). Claims 7 and 8 were rejected under Section 103(a) as allegedly unpatentable over Muramatsu et al. and Silverbrook in view of AAPA. Claims 11-14 were rejected under Section 103(a) as allegedly unpatentable over Muramatsu in view of Silverbrook, and further in view of U.S. Patent No. 5,040,079 (Shimizu). Claims 15 and 16 were rejected under Section 103(a) as allegedly unpatentable over Muramatsu in view of Silverbrook, Shimizu, and AAPA. Applicant respectfully traverses these rejections and submits that

independent Claims 1 and 11, together with the remaining dependent claims, are patentably distinct from the proposed combination of the cited references for at least the following reasons.

Claim 1 requires a method of automatically laying out a print job for printing on a printer having a plurality of available media sizes. The method includes setting up the print job. The print job includes data denoting a print area. The print area includes a length and a width of a finished output. The method also includes determining whether the print area is smaller than an available media size by a bleed margin requirement, the bleed margin requirement being associated with a bleed margin required by the printer. Further, the method includes automatically enabling the printer to print full-bleed and determining whether the print area must be rotated to fit the print area on an available media size while accounting for the bleed margin requirement. In addition, the method includes automatically selecting a media size from those available that accommodates the print area and the bleed margin requirement. Further still, the distance and direction the print area must be shifted to locate the print area on the media are automatically calculated in such a manner as to optimize the image location on the selected media while accounting for the bleed margin requirement for efficient post-print trimming. The method also includes printing the print job with the calculated image area shift and image area rotation.

As reflected in Claim 1, the present invention simplifies the process of determining what output media size and image location on the output media will allow efficient trimming to occur. See page 4, lines 11-20 of the originally filed specification. "Trimming," in this context, refers to the process of physically trimming the output media so that required final dimensions of the output media are met. See page 1, lines 17-27 of the originally filed specification. Commonly, trimming involves physically trimming the output media to remove margins where the printer was unable to print, so that the printed image fills the entire output media. According to Claim 1, efficient trimming is provided for by accounting for the bleed margin requirement associated with a printer when determining the selected media size and image location.

While Applicant acknowledges that full-bleed printing, as well as shifting and rotating images relative to output media are well known in the art, Applicant submits that none of the cited references are believed to teach or

suggest, either separately or in any proper combination, automatically selecting a media size and a print area (e.g., image) location on selected output media while accounting for a bleed margin requirement in order to make post-process trimming more efficient. (See Claim 1, which requires, among other things, (a) that a media size from those available be automatically selected such that the media size accommodates the print area along with the bleed margin requirement, (b) determining whether the print area must be rotated to fit the print area on an available media size while accounting for the bleed margin requirement, and (c) that the distance and direction the print area must be shifted to locate the print area on the media is calculated in such a manner as to optimize the image location on the selected media while accounting for the bleed margin requirement for efficient post-print trimming. Support for these features can be found in the specification at least at page 7, lines 10-18, which is described in reference to FIG. 2a. Support for these features also may be found in the specification at least at page 8, lines 6-7, which is described in reference to FIG. 2b.)

To elaborate, the Muramatsu et al. patent is understood to disclose adjusting an orientation of an image of an original document such that a binding may be formed at an appropriate position on a copy of the original document. See Abstract, col. 11, lines 26-55. More particularly, the Muramatsu et al. patent provides “a copying apparatus capable of forming a binding reliably at a desired position without regard to the original document placement position. . . .” Col. 1, lines 58-62. Nothing in the Muramatsu et al. patent is understood to pertain to automatically selecting a media size and a print area (e.g., image) location on selected output media while accounting for a bleed margin requirement in order to make post-process trimming more efficient. In fact, nothing in the Muramatsu et al. patent is understood to pertain to providing for efficient trimming.

In particular, the Muramatsu et al. patent is not understood to disclose automatically selecting a media size that accommodates the print area along with the bleed margin requirement. The Muramatsu et al. patent is understood to disclose receiving a selected output paper size, and not automatically selecting one that accounts for a bleed margin requirement. See col. 11, lines 12-15.

The Office Action refers to col. 8, lines 43-45 of the Muramatsu et al. patent as allegedly disclosing selecting a media size from the available media.

(See page 6 of the Office Action.) This passage is understood to pertain to identifying a paper size associated with the original document, and not automatically selecting an output media size that accommodates the print area along with the bleed margin requirement.

Further, the Muramatsu et al. patent is not understood to teach or suggest determining a print area (e.g., image) location on selected output media in order to make post-process trimming more efficient. Although col. 11, lines 26-41 and Fig. 23 of the Muramatsu et al. patent, referred to by the Office Action at page 6, pertain to rotating an image of a document, nothing has been found to relate to shifting and/or rotating a print area relative to selected output media to providing efficient trimming.

The Silverbrook publication is understood to disclose, among other things, a compression system for electronic collation and page storage. See the second to last line of page 27 of 35 of the Silverbrook publication, which is cited in the Office Action. This compression system operates using certain parameters including page size, print area, resolution, color space, and contone color resolution. See pages 27-28 of the Silverbrook publication. Regarding the print area parameter, this parameter is set in the provided example to be equivalent to the page size. See the first full paragraph of page 28 of the Silverbrook publication. By setting the print area parameter equal to the page size parameter, full bleed printing is provided. See *id.* However, the print area parameter can be set to accommodate margins. See *id.* Although Applicant does not dispute that full bleed printing is known in the art, Applicant respectfully submits that the Silverbrook passages cited in the Office Action do not teach or suggest automatically selecting a media size and manipulating a print area location in a full bleed printing environment to provide for efficient trimming. In particular, nothing in the Silverbrook publication is understood to pertain to automatically selecting a media size and a print area (e.g., image) location on selected output media while accounting for a bleed margin requirement in order to make post-process trimming more efficient.

The Shimizu patent is understood to disclose an image forming system that includes a quick way to perform image trimming, movement, and scaling functions without having a large image memory. See col. 1, lines 48-61, and col. 2, lines 8-13. The Office Action refers to the Shimizu patent's image

trimming function (Fig. 15, col. 14, lines 1-38) to allegedly teach calculating the distance and direction the print area must be shifted to locate the print area on the media to optimize the image location for minimizing the *post-print* trimming. (emphasis added) See pages 14-15 of the Office Action. However, the trimming referred to in the Shimizu patent is not understood to pertain to post-print trimming. As shown in Fig. 16(a) of the Shimizu patent and as discussed at col. 4, line 46 to col. 5, line 18, the trimming referred to by the Shimizu patent is understood to pertain to selecting a sub-region (see picture (2) of Fig 16(a)) of an input image and eliminating the remainder of the input image. The sub-region of the input image may be moved, enlarged, reduced, etc. See col. 4, line 46 to col. 5, line 18 and Fig. 16(a) of the Shimizu patent.

Applicant notes that col. 4, lines 27-45 of the Shimizu patent acknowledges problems of depositing toner on the leading edge of the copy paper, but its solution is to cut the video signal area corresponding to 2mm width at the leading edge of the copy paper. Although this passage may acknowledge known problems associated with full-bleed printing, Applicant submits that this passage, as well as the remainder of the Shimizu patent, does not teach, suggest, or pertain to automatically selecting a media size and a print area (e.g., image) location on selected output media while accounting for a bleed margin requirement in order to make *post-process* trimming more efficient.

The passages pertaining to Applicant's background of the invention cited in the Office Action also are not believed to teach or suggest automatically selecting a media size and a print area (e.g., image) location on selected output media while accounting for a bleed margin requirement in order to make post-process trimming more efficient. Applicant's background acknowledges the problems associated with trimming and full-bleed printing, but does not provide the inventive solution required by Claim 1.

In summary, the Muramatsu et al. patent is understood to pertain to image manipulation to achieve consistent binding. The Silverbrook publication is understood to disclose, among other things, an image compression scheme that can accommodate margins or no margins (full-bleed printing). The Shimizu patent is understood to relate to an image forming system capable of performing image manipulation without the aid of a large image memory. None of these references are believed to teach or suggest automatically selecting a media size

and a print area (e.g., image) location on selected output media while accounting for a bleed margin requirement in order to make post-process trimming more efficient. Further, none of these references are believed to pertain to providing efficient trimming or even acknowledge the problems associated with post-process trimming, and, consequently, Applicant respectfully submits that one skilled in the art would have no motivation to combine these references to arrive at the procedure of Claim 1 which does provide efficient trimming. Therefore, Applicant respectfully submits that Claim 1 is patentable over these references, taken separately or in any proper combination, for at least the reasons discussed above.

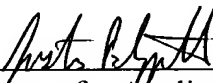
Independent Claim 11 includes the same or similar features discussed above in connection with Claim 1 and is believed to be patentable for at least the same reasons. In particular, Claim 11 requires, among other things, that the printer be capable of full-bleed printing on three edges and require a printer margin on one edge of the media, and that the printer margin be automatically accounted for in selecting the media size and determining the appropriate print area shift and print area rotation.

The other rejected claims in this application depend from one or another of the independent claims discussed above and, therefore, are submitted to be patentable for at least the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, individual reconsideration of the patentability of each claim on its own merits is respectfully requested.

This Amendment After Final Action is believed clearly to place this application in condition for allowance and, therefore, its entry is believed proper under 37 C.F.R. §1.116. Accordingly, entry of this Amendment After Final Action, as an earnest effort to advance prosecution and reduce the number of issues, is respectfully requested. Should the Examiner believe that issues remain outstanding, it is respectfully requested that the Examiner contact Applicant's undersigned attorney in an effort to resolve such issues and advance the case to issue.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and the allowance of the present application.

Respectfully submitted,



Attorney for Applicant(s)
Registration No. 52,118

Justin D. Petruzzelli/d-n
Rochester, NY 14650
Telephone: 585-726-7522
Facsimile: 585-477-4646

If the Examiner is unable to reach the Applicant(s) Attorney at the telephone number provided, the Examiner is requested to communicate with Eastman Kodak Company Patent Operations at (585) 477-4656.